

Riō[®]

Carbon 5GB



Table of Contents

Getting Started

Connections

Software Setup

Basic Operations

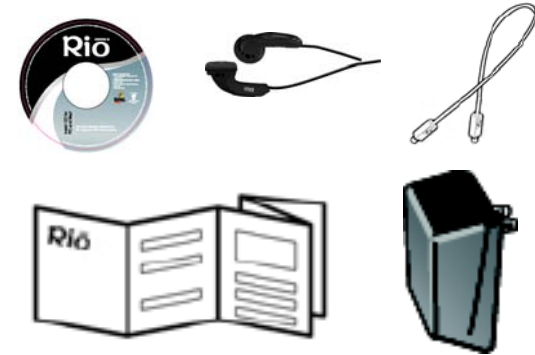
Advanced Features

Help

Index

Package Contents

- Rio Carbon
- Installation CD
- Earphones
- USB-AC Adapter
- Quick Start Poster
- Mini USB Cable



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Table of Contents

- Package Contents..... ii
- Copyright/Trademarks..... ii

1 - Getting Started

- Welcome** 1
 - Learning More..... 1
- Tour of the Rio Carbon**..... 2
- LCD Overview** 4
 - Player Mode 4
 - Menu Mode 4
 - Date View..... 5
 - Time Code View..... 5
 - Track Format View 5
 - Play Screens 5

2 - Connections

- Basic Connections**..... 6
 - Earphones 6
 - USB-AC 6
 - Additional Accessories 7

3 - Software Setup

- Windows** 9
 - Rio Music Manager 10
- Mac**..... 11
 - iTunes..... 11

4 - Basic Operations

- Basic Operations**..... 12
- Copy Tracks** 13
 - Copying Tracks with Rio Music Manager 13

- Transfer Tracks** 14
 - Rio Music Manager 14
 - Transferring Tracks using
Windows Explorer 15
 - iTunes..... 16

Control the Player..... 17

- Play Music**..... 18
 - Play All 19
 - Album 19
 - Artist 19
 - Genre 20
 - Track 20
 - Year 20
 - New Music..... 20
 - Playlist..... 21
 - Spoken Word 21
 - Recordings 21

5 - Advanced Features

- Advanced Features**..... 22
- Bookmarks** 23
- Settings**..... 24
 - Playback..... 25
 - Equalizer 26
 - Custom..... 26
 - EQ Off..... 26
 - Preset 26
 - Power 27
 - Resume 28
 - Display 29
 - Time 30
 - Language 31
 - Lock Setup..... 32

- Lock Mode33
- Tags.....34
- Voice Record35**
- Recordings36**
- Stopwatch.....37**
- About38**

6 - Help

- Troubleshooting.....39**
 - Customer Service Information39
 - Frequently Asked Questions.....40
- Glossary of Digital Audio Terms...47**
 - Bass.....47
 - Bitrate47
 - Codec47
 - DRM.....47
 - Firmware.....48
 - Gain.....48
 - ID3 Tags48
 - Mass Storage Class48
 - MP3.....48
 - Playlist.....48
 - Rip and Encode.....49
 - Synchronize49
 - Treble49
 - VBR.....49
 - WMA49
- ECC, FCC, and Industry Canada**
- Compliance.....50**
 - Statement of Compliance50
 - Federal Communications Commission50
 - Industry Canada.....50

- Safety51**
 - IMPORTANT SAFETY INSTRUCTIONS51
 - CAUTION.....51

Chapter 1

Getting Started

:: Welcome

Thank you for purchasing the Rio Carbon. Small and powerful, the Rio Carbon can store thousands of songs on its 5GB* hard drive. The Rio Carbon includes a USB-AC adapter, earphones, a lighted LCD display, a long lasting built-in battery, and high speed USB 2.0 connectivity.

Learning More

- Refer to the Quick Start poster for the basics on how to set up and start using the Rio Carbon.
- Visit the Rio website at www.rioaudio.com.

** Actual formatted capacity less. 1GB = 1,000,000,000 bytes.*

:: Tour of the Rio Carbon

POWER

Press and hold to turn the Rio Carbon on.

Press and hold to turn the Rio Carbon off.

MICROPHONE

Records sound when the Voice Recorder is in use.

CENTER

In Menu mode, press to select options.

In Player mode press to cycle through Time Code View, Track Format View, and Date View.

STOP

Press to stop playback.



WHEEL

In Player mode, rotate to adjust volume level.

In Menu mode, press or rotate to control menu navigation.

MENU

In Player mode, press to enter Menu mode.

In Menu mode, press to return to Player mode.

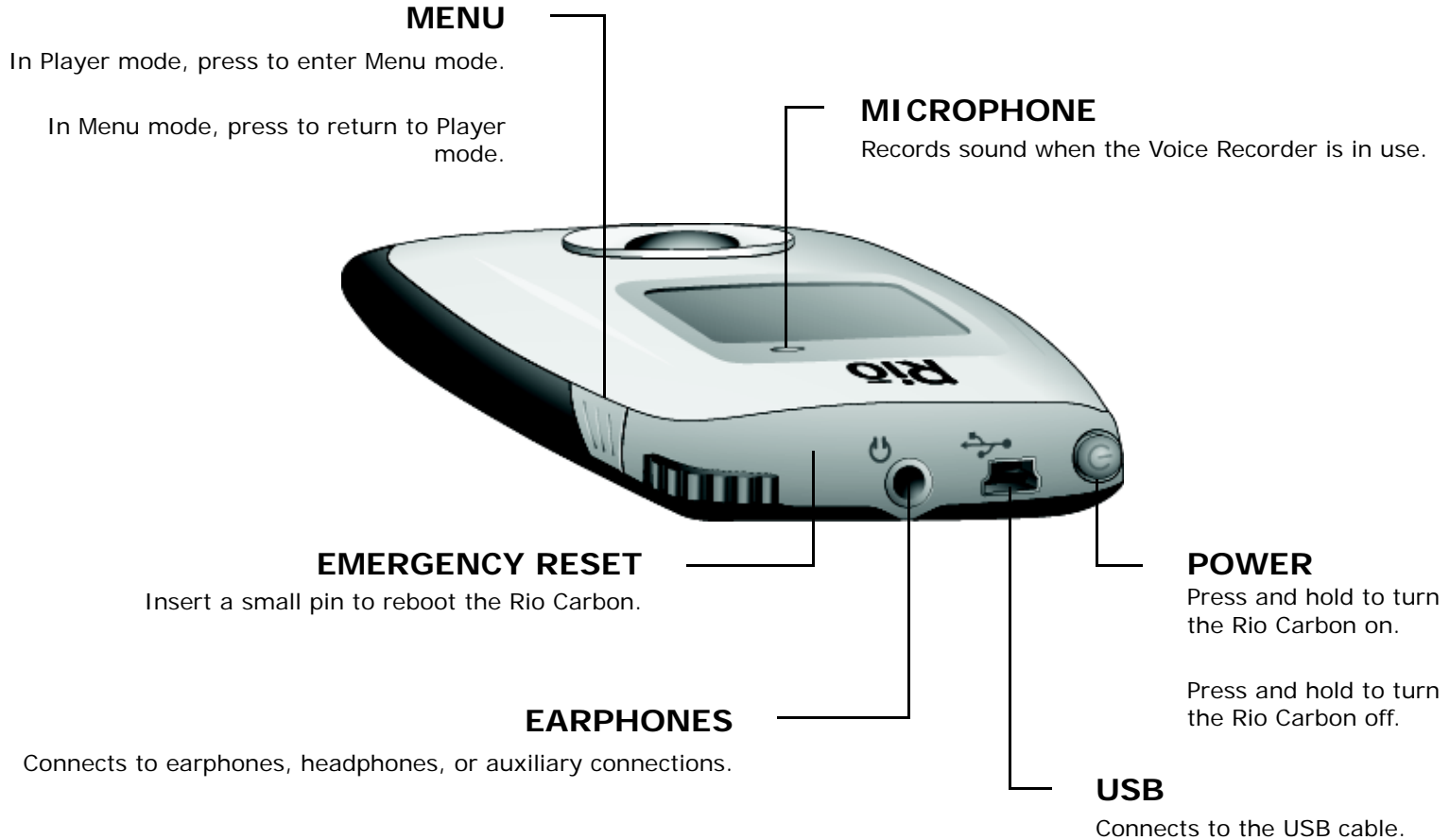
PLAY/PAUSE

Press to play or pause playback.

FORWARD and REVERSE

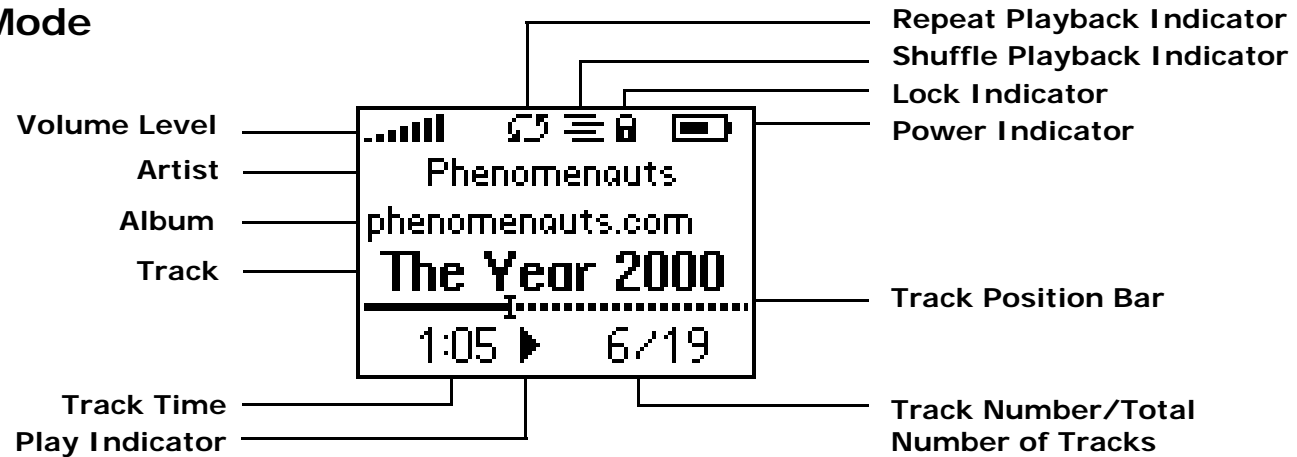
Press to skip to the next or previous track.

Select and hold to scan forward or reverse.

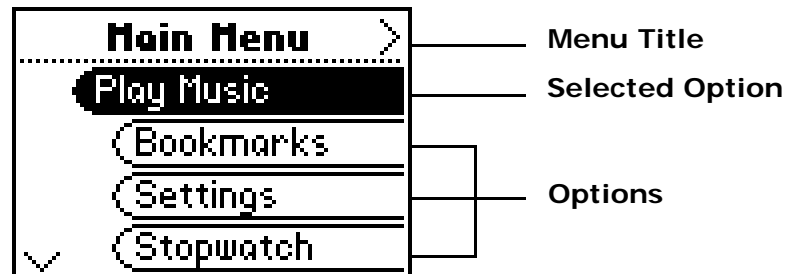


:: LCD Overview

Player Mode



Menu Mode



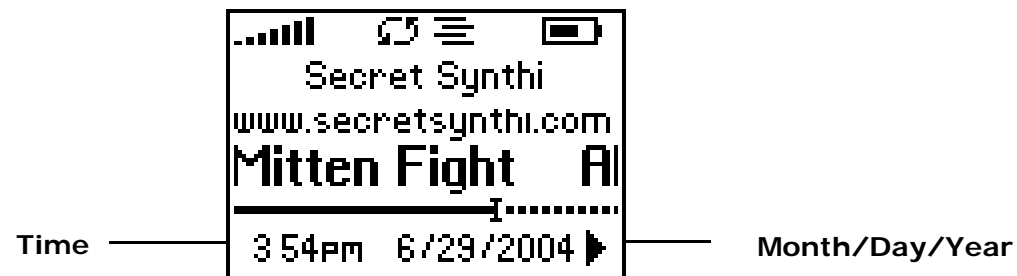
Time Code View



Play Screens

Press **CENTER** to cycle through Time Code, Date, Track Format, and EQ setting views.

Date View



Track Format View



Chapter 2

Connections

:: Basic Connections

This chapter describes how to connect the Rio Carbon to Earphones, USB cables, and alternate devices. Basic connections include:

Earphones

Connect the supplied earphones to the **EARPHONES** port on the top of the Rio Carbon.



USB-AC

The Rio Carbon requires a USB connection to transfer files and/or recharge its battery. If using a USB hub, connect to a powered USB hub. Unpowered USB hubs may not work.

Use the USB cable to connect the Rio Carbon to the USB port on your computer to transfer music or files to and from the Rio Carbon and your computer. When connected to the USB port on your computer, the Rio Carbon cannot play music.



Use the USB cable to connect the Rio Carbon to the USB port on the USB-AC adapter to quickly recharge the battery on the Rio Carbon. When connected to the USB port on the USB-AC adapter, the Rio Carbon can play music.



USB Detection with the Windows Device Driver

USB connectivity is ready to work immediately after [Rio Music Manager](#) has been installed.

If for any reason the Windows Device Driver Wizard is displayed after the USB cable has been plugged into both the Rio Carbon and the computer, please follow these steps:

- 1 Confirm the Rio installation CD is in the computer's CD-ROM drive.
- 2 Check the **CD-ROM Drives** box when the Windows Device Driver Wizard requests the location of the Rio Carbon drivers.
- 3 Click **Next** and follow the Windows Device Driver Wizard instructions.



Additional Accessories

Get the most out of your Rio with additional accessories available online at the [Rio website](#). Some of the most popular accessories include the following:

- **Rio Carbon Carrying Case**

Replace carrying cases that have been worn down by intensely active lifestyles.

- **Rio Car Stereo Adapter**

Upgrade your car stereo for hundreds of dollars less than buying a new MP3 CD player. The Rio car stereo adapter lets you play your favorite music in any vehicle equipped with a standard cassette deck.



Chapter 3

Software Setup

Software Setup

Software found on the Rio installation disc should be installed on a computer before using the Rio Carbon. Rio Music Manager should be installed on computers that use the Windows operating systems. iTunes and the Rio iTunes plug-in should be installed on computers that use a Mac operating system.

Windows

Mac

:: Windows

Follow these instructions to load **Rio Music Manager** onto your PC.

- 1 Place the installation CD label-side up into the computer's CD-ROM drive.

The Rio installation software launches automatically.

- 2 Click **Rio Music Manager INSTALL NOW** (required) and follow the on-screen instructions.

- 3 If prompted, reboot the computer when the installation is complete.



- If Rio installation software does not display automatically, follow these steps to begin the installation manually:

- 4 Double-click the **My Computer** icon,  , on the Windows desktop or taskbar.

- 5 Double-click the **CD-ROM** icon, 

- 6 Double-click the **Install** icon, 

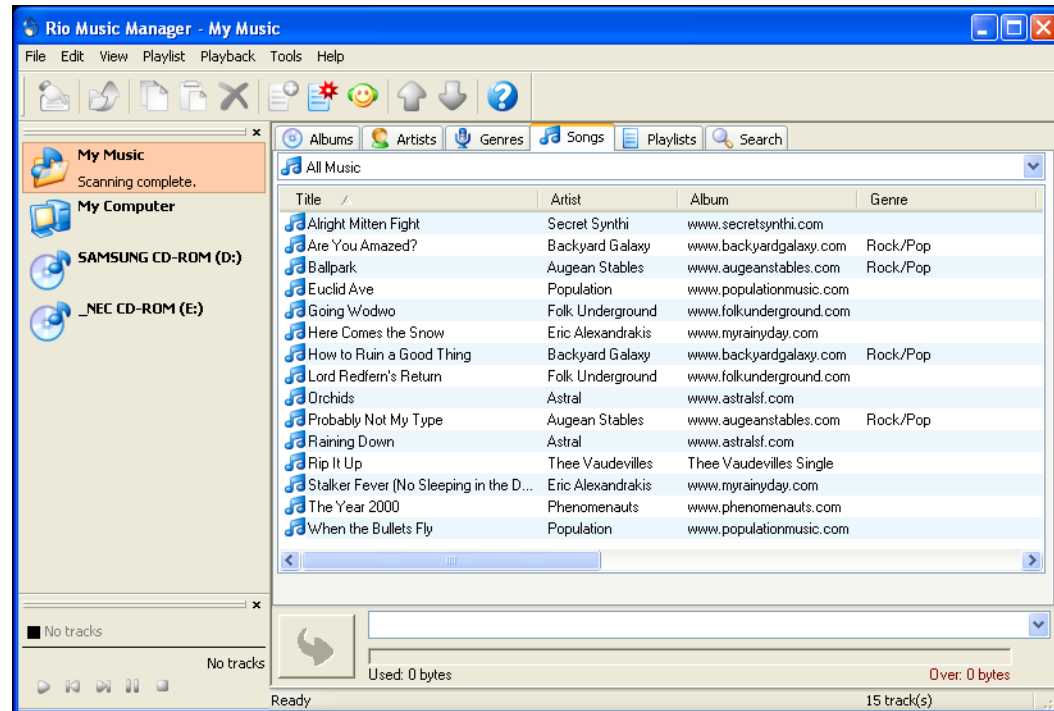
- 7 Go to Step 2.

Compact Disc
(D:)
Install

Rio Music Manager

Rio Music Manager is an all-in-one solution that can rip, encode, and manage entire collections of digital audio tracks. Rio Music Manager provides the following capabilities:

- Save (Rip and Encode) audio CDs into compressed digital audio formats. Rio Music Manager encodes WMA files by default and MP3 via an optional upgrade pack.
- Automatically Synchronize the music collection on your computer with your Rio Carbon.
- Edit ID3 Tags and WMA tags on digital audio tracks.
- Organize and manage digital audio tracks on your computer and your Rio Carbon.
- Search for tracks on your computer and your Rio Carbon.
- Create custom Playlists.
- Transfer tracks from your computer to your Rio Carbon.



:: Mac

iTunes

Your Rio Carbon is compatible with Macintosh OS X v10.2 systems using Apple's iTunes 4.2 or greater. iTunes is free and available [online](#). Support for iTunes can be found [here](#).

Follow these instructions to load the software that enables your Macintosh to recognize the Rio Carbon:

- 1 Place the software CD label-side up into the computer's CD-ROM drive.
- 2 Double-click the **Rio** icon on your computer's desktop.
- 3 Double-click the **Install** icon.

The Rio Installation Screen will display.

- 4 Click **iTunes Plug-in**.

The Plug-in Installation Screen will display.

- 5 Click **Install**.

- 6 Click **Done**.

Chapter 4

Basic Operations

:: Basic Operations

Enjoying music on the Rio Carbon is easy. Basic operations of the Rio Carbon include:

- Copy Tracks
- Transfer Tracks
- Control the Player
- Play Music

:: Copy Tracks

Copying Tracks with Rio Music Manager

Copying tracks from Audio CDs involves two steps commonly known as **ripping and encoding**. Ripping and encoding refers to the process of ripping (copying) audio from a CD and encoding (saving) the audio content into a compressed digital audio format like MP3 or WMA.

- 1 Launch the Rio Music Manager.
- 2 Insert an Audio CD into your CD-ROM drive.
- 3 Click the CD-ROM icon on the Rio Music Manager Device List.
- 4 Use any of the following techniques to select tracks:

Track Type	Technique
Single track.	• Click the track.
Multiple tracks.	• Press SHIFT +Click or CTRL +Click.
All tracks.	• Press CTRL + A .
No tracks.	• Press CTRL + N .
Every track except for the currently selected tracks.	• Select Edit , Invert Selection .

- 5 Click  to begin copying tracks to your computer.

:: Transfer Tracks

Rio Music Manager

Transferring tracks from the PC to the Rio Carbon with the Rio Music Manager involves selecting tracks, then transferring them onto the Rio Carbon.

- 1 Launch the Rio Music Manager.
- 2 Click **My Music** in the left frame to access tracks. Rio Music Manager will scan the computer's hard drives for digital audio files that are compatible with the Rio Carbon. Files are automatically categorized by album title and displayed in the Track List.
- 3 Select tracks within a category of tracks. Categories include Albums, Artists, Genres, Songs, and Playlists.

For example, if you wish to copy all tracks from a favorite artist onto the Rio Carbon, click the Artists tab and then use any of the techniques in **Step 4** to select the desired tracks.

- 4 Use any of the following techniques to select files:

File type	Technique
Single track, album, or artist.	• Click the track, album, or artist.
Multiple tracks, albums, and/or artists.	• Press SHIFT +Click or CTRL +Click.
All tracks, albums, and artists.	• Press CTRL + A .
No tracks, albums, or artists.	• Press CTRL + N .
Every track except for the currently selected tracks.	• Select Edit , Invert Selection .

- 5 After the tracks have been selected they can be copied to the Rio Carbon by clicking



Transferring Tracks using Windows Explorer

Transferring tracks from the PC to the Rio Carbon using Windows Explorer is as easy as Copy and Paste.

- 1 Connect the Rio Carbon to a computer using the supplied USB cable.
- 2 Double-click **My Computer** on the Windows Desktop or in the Start Menu.
- 3 Locate **MP3** or **WMA** audio files on the computer.
- 4 Highlight files and/or folders to transfer to the Rio Carbon.
- 5 Click **Edit**.
- 6 Click **Copy**.
- 7 Double-click **My Computer** on the Windows Desktop or in the Start Menu to open another window.
- 8 In the new window, locate the **Rio Carbon (X:)** icon that is associated with the Rio Carbon. (**X** equals the drive letter assigned to the Rio Carbon.)
- 9 Double-click **Rio Carbon (X:)**.
- 10 Click **Edit**.
- 11 Click **Paste**.

Any type of file can be transferred using this method but to assure full functionality, **Playlists** and copy protected music using **Digital Rights Management (DRM)** should be transferred to Rio players using Rio Music Manager.



- Files and folders can also transferred to the Rio Carbon using drag-and-drop techniques.

iTunes

- 1 Launch iTunes.
- 2 Connect the Rio Carbon to a USB port on the computer.
- 3 Power the Rio Carbon on if it does not power on automatically.
- 4 Click **Library** in the iTunes Source frame.
- 5 Select tracks to transfer.
- 6 Drag and drop selected tracks to the **Rio Carbon Player** in the iTunes Source frame.



- iTunes will only refresh the audio contents located on the Rio Carbon after all selected tracks have been transferred.

:: Control the Player

The controls on the Rio Carbon work as follows:

- **POWER**
Press and hold to turn the Rio Carbon on or off.
- **MENU**
In Player mode, press to enter Menu mode. In Menu mode, press to return to Player mode.
- **CENTER**
In Player mode, press to cycle through **Play Screens**. In Menu mode, press to select menu options.
- **PLAY/PAUSE**
In Player mode, press to play or pause playback. In Menu mode, press to control menu navigation.
- **FORWARD** and **REVERSE**
In Player mode, press to skip to the next or previous track. Press and hold to scan forward or reverse through a track. In Menu mode, press to control menu navigation.
- **STOP**
In Player mode, press to stop playback. In Menu mode, press to control menu navigation.
- **WHEEL**
In Player mode, rotate to adjust the volume level. In Menu mode, press or rotate to control menu navigation.



Controls

Locations of all controls can be found on pages 2 and 3.

:: Play Music

The Rio Carbon can play audio tracks using a variety of playback formats. Any format can be used within a matter of seconds so you can spend more time enjoying tracks and less time arranging them.



Play All

Album

Artist

Genre

Track

Year

New Music

Playlist

Spoken Word

Recordings

Play All

To play all tracks on the player please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Play All**.

Album

To play tracks from specific albums please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Album**.
- 4 Select an album.
- 5 Select **Play All** or a specific album.
- 6 If a specific album is selected, select **Play All** or a specific track.

Artist

To play tracks from a specific artist please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Artist**.
- 4 Select **Play All** or a specific album.
- 5 If a specific album is selected, select **Play All** or a specific track.

Genre

To play tracks from a specific genre please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Genre**.
- 4 Select **Play All**, a specific genre, or **[none]**.
- 5 If a specific genre is selected, select **Play All** or a specific track.

Track

To play a specific track please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Track**.
- 4 Select **Play All** or a specific track.

Year

To play tracks from a specific year please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Year**.
- 4 Select **Play All** a specific year, or **[none]**.

New Music

Select to compose a running order composed of the most recently played tracks during a set amount of time. The most recently played tracks are played first. To play tracks using **New Music** please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **New Music**.
- 4 Select **1 day** (the default setting), **2 days**, **1 week**, or **1 month**.

Playlist

To play tracks from playlists created in Rio Music Manager please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Playlist**.
- 4 Select **Play All** or a specific playlist.

Spoken Word

Select to play tracks formatted using the Audible #2 and #3 formats. To play spoken word tracks please follow these steps:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Spoken Word**.
- 4 Select **Play All** or a specific Audible track.



- When in spoken word mode, the Rio Carbon display's the following icon:  .
- When in spoken word mode, press **FORWARD** or **REVERSE** to skip from one section of the track to another.

Recordings

To play recordings created using the Rio Carbon's internal microphone:

- 1 Press **MENU**.
- 2 Select **Play Music**.
- 3 Select **Recordings**.
- 4 Select **Play All** or a specific recording.

Chapter 5

Advanced Features

:: Advanced Features

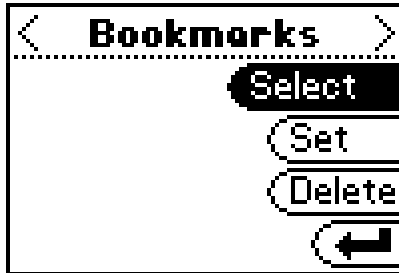
Advanced features of the Rio Carbon include:

- Bookmarks
- Settings
- Voice Record
- Recordings
- Stopwatch
- About

:: Bookmarks

Bookmarks store specific player settings, including the current running order, the current track, the current time position of the track, and the [Playback](#) settings. Users can save these settings in a bookmark and restore them whenever they use the Rio Carbon. Bookmarks are great for:

- Placing digital bookmarks in digital audio books or other extended length tracks.
- Maintaining positions in long term running orders.
- Sharing your player with others without losing personal settings.



- 1 Press **MENU**.
- 2 Select **Bookmarks**.
- 3 Select a Bookmark option.

Bookmark options include:

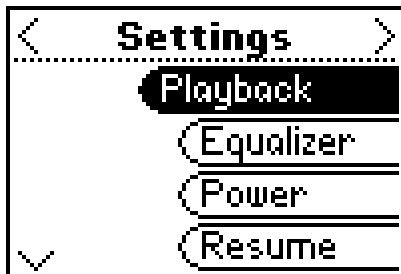
- **Select**
Select a bookmark. Press **CENTER** to restore the selected bookmark settings.
- **Set**
Select a bookmark. Press **CENTER** to save the current settings to a bookmark.
- **Delete**
Select a bookmark. Press **CENTER** to delete the selected bookmark.



- *In Player mode, press and hold **CENTER** to quickly bookmark the current settings.*
- *The Rio Carbon automatically saves user settings when it is turned off. These settings are automatically restored when the Rio Carbon is turned on. Settings saved automatically are not saved as a bookmarks.*

:: Settings

Rio Carbon settings include:



Playback

Equalizer

Power

Resume

Display

Time

Language

Lock Setup

Lock Mode

Tags

Playback

Various playback settings can be set to modify the way the Rio Carbon plays tracks. Tracks can be shuffled at random and/or repeated continuously.



- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Playback**.
- 4 Select **Playback** options.
- 5 Press **CENTER** to apply settings.

Playback options include:

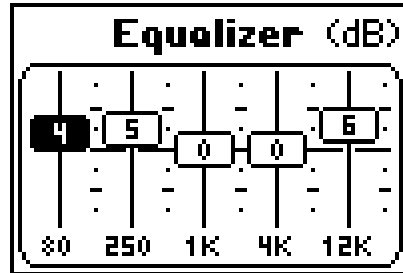
- **Shuffle**
Set selected tracks to play in standard or random order. Settings include **Off** (the default setting) and **On**.
- **Repeat**
Set selected tracks to repeat playback of all tracks or the current track. Settings include **Off** (the default setting), **All**, and **One**.

Equalizer

The sound of tracks played on the Rio Carbon can be adjusted using various preset and fully customizable equalizer options. Equalizer settings include:

Custom

Custom mode allows the Rio Carbon's settings to be adjusted according to personal preferences.



- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Equalizer**.
- 4 Select **Custom**.
- 5 Adjust 5-band equalizer. Press **FORWARD** or **REVERSE** to navigate between frequencies. Press **PLAY/PAUSE** or **STOP** to boost or cut the **Gain** of the frequency.
- 6 Press **CENTER** to save settings and return to Player mode.

EQ Off

Select the **EQ Off** equalizer option to apply no equalizer adjustments to audio content on the Rio Carbon.

- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Equalizer**.
- 4 Select **EQ Off**.
- 5 Press **CENTER** to set the **EQ Off** equalizer option and return to Player mode.

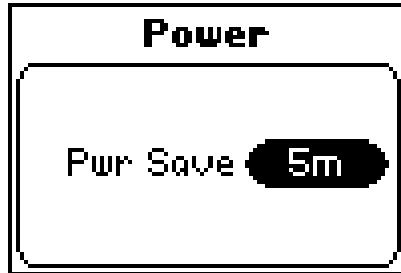
Preset

Select a **Rock**, **Jazz**, **Classical**, **Pop**, or **Trance** equalizer option to change the sound of tracks according to the selected preset settings.

- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Equalizer**.
- 4 Select **Rock**, **Jazz**, **Classical**, **Pop**, or **Trance**.
- 5 Press **CENTER** to set the selected equalizer option and return to Player mode.

Power

By adjusting the **Power** settings the Rio Carbon can conserve energy and extend the amount of playback time during each battery charge.



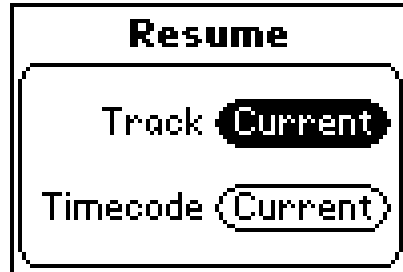
- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Power**.
- 4 Select a **Pwr Save** setting.
- 5 Press **CENTER** to apply settings and return to Player mode.

Power options include:

- **Pwr Save**
Set the Rio Carbon to enter shutdown after being idle for a specific number of minutes. Settings include **1m**, **5m** (the default setting), **10m**, **30m**, and **Never**.

Resume

Use the options in the **Resume** menu to set the track that the Rio Carbon will play whenever it is powered on.



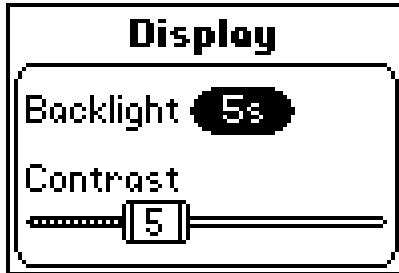
- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Resume**.
- 4 Select **Resume** options.
- 5 Press **CENTER** to apply settings and return to Player mode.

Resume options include:

- **Track**
Set the Rio Carbon to begin playback of the last track played before shutdown or the first track in the running order when the Rio Carbon is powered on. Settings include **Current** (the default setting) and **First**.
- **Timecode**
Set the Rio Carbon to begin playback of the last track played at the point the track was at during shutdown or at the start of the track. Settings include **Current** (the default setting) and **Start**.

Display

Use the **Display** menu to adjust backlight and contrast settings.



- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Display**.
- 4 Adjust **Backlight** options and **Contrast** settings.
- 5 Press **CENTER** to apply settings and return to Player mode.

- **Backlight**

Set the backlight on the Rio Carbon to shut itself off after a specific number of seconds. Settings include **Off**, **2s**, **5s**, (the default setting) **10s**, **20s**, and **On**. **On** sets the backlight to remain lit constantly.



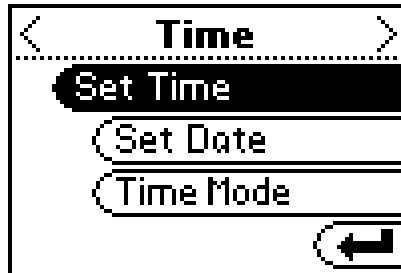
- *To conserve battery life, the **On** setting should rarely be used.*

- **Contrast**

Press **FORWARD** and **REVERSE** to control the contrast slider. Use the contrast slider to set how light or dark the images on the LCD will appear. Setting the contrast too high will result in washed out images. Setting the contrast too dark will result in images that are too dark to read.

Time

Use the options in the **Time** menu to set the Rio Carbon's internal clock. Time is set automatically every time tracks are transferred to the Rio Carbon using Rio Music Manager.



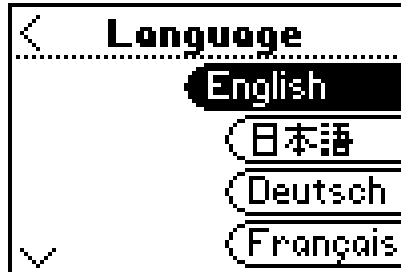
- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Time**.
- 4 Select **Set Time**, **Set Date**, or **Time Mode** options.
- 5 Press **CENTER** to apply settings and return to Player mode.

Time settings include:

- **Set Time**
Options include **Hour**, **Minute**, and **AM / PM**.
- **Set Date**
Options include **Month**, **Day**, and **Year**.
- **Time Mode**
Options include **12 hour** (the default setting) and **24-hour** time formats and **USA** (the default setting), **Europe**, and **Japan** date formats.

Language

The Rio Carbon menus can be set to display in one of six languages.



- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Language**.
- 4 Select a **Language** setting.
- 5 Press **CENTER** to set the display language and return to Player mode.

Language settings include:

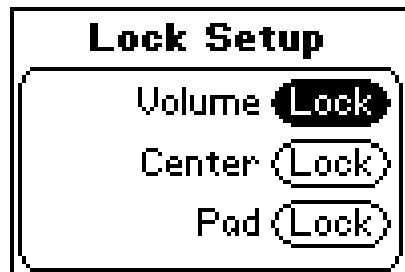
- **English** (the default setting)
Set the display language to **English**.
- 日本語
Set the display language to **Japanese**.
- **Deutsch**
Set the display language to **German**.
- **Français**
Set the display language to **French**.
- **Español**
Set the display language to **Spanish**.



- To return to the language menu from any language setting, press **MENU**, select the **third** option, select the **seventh** option.

Lock Setup

Use the options in the **Lock Setup** menu to enable various controls when the lock is enabled.



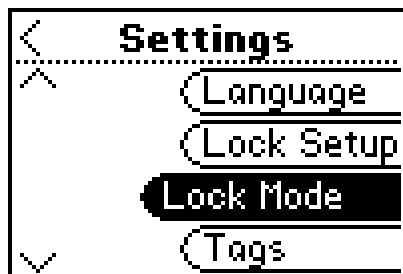
- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Lock Setup**.
- 4 Select **Lock Volume** and **Control Pad** options.
- 5 Press **CENTER** to apply settings and return to Player mode.

Lock Setup settings include:

- **Volume**
Options include **Lock** (the default setting) and **Off**. When set to **Off**, the volume level can be adjusted even when the Rio Carbon has been locked.
- **Center**
Options include **Lock** (the default setting) and **Off**. When set to **Off**, pressing **CENTER** will scroll through [Time Code View](#), [Track Format View](#), and [Date Views](#) even when the Rio Carbon has been locked.
- **Pad**
Options include **Lock** and **▶/|| (PLAY/PAUSE)**. When set to **▶/||**, any **CONTROL PAD** movement will be interpreted as the **▶/||** control.

Lock Mode

Select **Lock Mode** to disable the Rio Carbon's buttons (based on **Lock Setup** settings) and prevent accidental operation.



- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Lock Mode**.

To exit **Lock Mode**, press and hold **MENU** and **CENTER** at the same time, then release.

Tags

Adjust **Tags** menu settings if the Rio Carbon displays random alphabet characters instead of the correct **ID3 Tags**. The Rio Carbon supports Latin- and Japanese-based languages. If ID3 tags are displayed properly then **Tags** menu settings do not need to be changed.

Rio Music Manager encodes tracks tags using the Unicode method. Properly tagged (Unicode) tracks are unaffected by changes to the **Tags** settings. All WMA tracks are Unicode.



- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select **Tags**.
- 4 Select **ASCII** (the default setting), **UTF-8**, or **Shift-JIS**.
- 5 Press **CENTER** to apply settings and return to Player mode.

Tags settings include:

- **ASCII**
Select to read ID3 tags that are encoded using the ASCII Latin alphabet. ASCII is an acronym for American Standard Code for Information Interchange.
- **UTF-8**
Select to read ID3 tags that are encoded using the UTF-8/Unicode format. UTF-8 is backwards compatible with ASCII. UTF is an acronym for Unicode Transformation Format
- **Shift-JIS**
Select to read ID3 tags that are encoded using the Shift-JIS format. Shift-JIS is a character encoding format created by Microsoft that is based on the Japanese Industrial Standard format.

:: Voice Record

Select to record audio using the Rio Carbon's internal microphone. Recording ID3 Tags can be edited using Rio Music Manager.



- 1 Press **MENU**.
- 2 Select **Voice Record**.

When in Voice Record mode, the following controls function differently:

- **CENTER**
Press to cycle through Voice Record [Play Screens](#).
- **PLAY/PAUSE**
Press to begin recording. After recording has started, press **PLAY/PAUSE** to pause recording.
- **FORWARD** and **REVERSE**
Press to select a prerecorded recording. If a prerecorded recording is selected, the current recording will be appended to the prerecorded recording.
- **STOP**
Press to stop a recording.

:: Recordings

Select to playback or delete recordings using the Rio Carbon's internal microphone.



- 1 Press **MENU**.
- 2 Select **Recordings**.
- 3 Select **Start/Stop Playback**, or **Delete**.

Recording options include:

- **Start/Stop**
Select to begin recording. After recording has started, return to the **Recordings** menu and select the **Stop** option to stop recording.
- **Playback**
Select a voice recording. Press **CENTER** to play the selected recording.
- **Delete**
Select a voice recording. Press **CENTER** to delete the selected recording.

:: Stopwatch

Use the stopwatch to keep track of time-sensitive events while listening to music.

- 1 Press **MENU**.
- 2 Select **Stopwatch**.
- 3 Press **CENTER**.

Lap statistics are displayed at the bottom of the **Stopwatch** screen. When a new lap is set, the difference, either faster (-) or slower (+) between new lap times and the average laptime is displayed for a few moments.

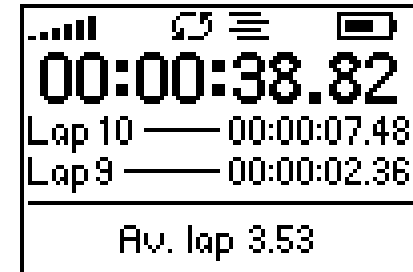
When in **Stopwatch** mode, the controls work in the following ways:

- **MENU**
Press to return to the **Main Menu**.

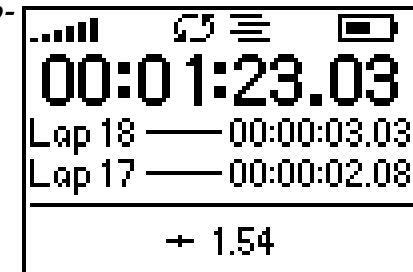


- *Pressing **MENU** and using other player functions will not turn the timer off. The timer will continue to run until **PLAY/PAUSE** is pressed while in **Stopwatch** mode.*

- **PLAY/PAUSE**
Press to start and stop the timer.
- **CENTER**
Press to set a lap time. Press and hold to return to single lap display. Multiple laps and lap averages will be lost.
- **STOP**
Press to reset timer.



Average Lap Time



Lap Difference

:: About

The about screen displays information about the Rio Carbon. Information includes the total amount of memory on the Rio Carbon, the amount of free memory, the number of tracks on the Rio Carbon, and the **Firmware** version.



- 1 Press **MENU**.
- 2 Select **About**.
- 3 Select **Player** or **Storage**.
- 4 Press **CENTER**.

About options include:

- **Player**
Displays firmware version, copyright, and Rio website information.
- **Storage**
Press **CENTER** to cycle through displays of memory usage graphic bar and memory usage (MB used/MB capacity), the total number of tracks, the total duration of all tracks, the number of playlists, and the number of personal files for both internal and external player memory on the Rio Carbon.

Chapter 6

Help

:: Troubleshooting

Customer Service Information

The FAQs below will help you solve common issues with your player. If you do not find the answers you need here, you can contact our Customer Service Department via any of the following methods:

Web: www.rioaudio.com/support

Technical Support Telephone (United States): (254) 299-2759

Technical Support Telephone (United Kingdom): 0207-744-0802

Technical Support Telephone (Canada): (905) 305-6565

Customer Service (United States): (254) 299-2759

Customer Service (United Kingdom): 0207-744-0802

Customer Service (Canada): (905) 305-6565

Customer Sales/Presales (United States): (866) 286-3662

Customer Sales/Presales (United Kingdom): 0207-744-0802

Customer Sales/Presales (Canada): (905) 305-6565

With every Rio product you receive the following support services:

- Unlimited access to the Rio web-based technical information resources, available 24 hours a day every day at <http://www.rioaudio.com/support>. Here you will find FAQ files, product updates, and other useful information.
- Unlimited e-mail support for the duration of your Rio product hardware warranty period.
- Access to the latest software updates and enhancements for Rio products via our [website](#).

Frequently Asked Questions

Question	Answer												
What type of files can I play with the Rio Carbon?	<ul style="list-style-type: none">• The Rio Carbon can play MP3, WMA, and Audible #2 and #3 format files.												
Can I add MP3 and WMA files to the player at the same time?	<ul style="list-style-type: none">• Yes. You can play MP3 and WMA audio content. They can be mixed together.												
What are the differences between MP3 and WMA files?	<ul style="list-style-type: none">• Because WMA's use a lower bitrate than equivalent MP3's they are generally half as large as MP3 files and you can store more music in less space on CDs, hard drives, or the Rio Carbon.												
How much music can I store on the Rio Carbon?	<ul style="list-style-type: none">• The amount of music that can be stored on the Rio Carbon depends on the bitrate of the files stored. The About menu lists the total amount of space, the amount of free space, and the number of tracks on the Rio Carbon. <table><thead><tr><th>Bitrate</th><th>Approximate amount of space required per minute of audio content</th></tr></thead><tbody><tr><td>64 kbps</td><td>0.5 MB</td></tr><tr><td>96 kbps</td><td>0.75 MB</td></tr><tr><td>128 kbps</td><td>1 MB</td></tr><tr><td>164 kbps</td><td>1.25 MB</td></tr><tr><td>192 kbps</td><td>1.75 MB</td></tr></tbody></table>	Bitrate	Approximate amount of space required per minute of audio content	64 kbps	0.5 MB	96 kbps	0.75 MB	128 kbps	1 MB	164 kbps	1.25 MB	192 kbps	1.75 MB
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64 kbps	0.5 MB												
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128 kbps	1 MB												
164 kbps	1.25 MB												
192 kbps	1.75 MB												

What kind of batteries can I use with the Rio Carbon?	<ul style="list-style-type: none"> The Rio Carbon uses a non-removable rechargeable lithium-ion battery.
Can I replace the battery in my Rio Carbon?	<ul style="list-style-type: none"> No.
Can I charge the Rio Carbon using the USB cable?	<ul style="list-style-type: none"> Yes. The USB-AC connection will power and charge the Rio Carbon. The USB-AC adapter should be used to charge the Rio Carbon. The USB-only connection will charge the battery at a much slower rate.
The drive stops spinning during playback. Is this normal?	<ul style="list-style-type: none"> Yes. It is normal for the drive to stop spinning during playback. Stopping the drive is part of the player's battery life management system. When the drive is stopped, the Rio Carbon conserves power and plays tracks from a memory buffer.
Will the Rio Carbon play Variable Bitrate (VBR) files?	<ul style="list-style-type: none"> Yes. Because there are many standards for VBR files, it cannot be guaranteed that every encoding software package will properly function with the Rio Carbon. VBR files that do not comply to standards may lack track time, fast forward, and/or rewind capabilities.
Why won't the Rio Carbon play secure, dated, or other DRM (digital rights management) encoded files?	<ul style="list-style-type: none"> DRM files may not work properly if the Rio Carbon's internal clock is no longer accurate. This can happen if the rechargeable batteries lose all charge for any period of time. Make sure the batteries are fully charged, then follow these steps: <ol style="list-style-type: none"> 1 Connect the Rio Carbon to the computer using the USB cable. 2 Transfer any track to the player using Rio Music Manager. 3 Connect to the secure service where the DRM encoded files came from. <p>The Rio Carbon's clock should now be in sync with your computer's clock.</p> <p>DRM files should now play correctly.</p>

Where is the battery indicator on my Rio Carbon?	<ul style="list-style-type: none"> The battery indicator on the Rio Carbon is located in the top-right corner of the display. The segments in the battery icon show the remaining battery power. The illumination of all segments indicates a fully charged battery. Non-illuminated segments indicate a run down battery. The battery indicator blinks when less than 20% of the charge on the battery remains.
What should I do if my Rio Carbon is not detected as a removable drive?	<ul style="list-style-type: none"> It is possible that a network drive is preventing the Rio Carbon from being mapped properly. This is a known Microsoft problem and has been documented in their knowledge base as KB297694. To resolve this issue and detect the Rio Carbon as a removable drive: <ol style="list-style-type: none"> 1 Click the Start Bar. 2 Right-click My Computer on the Windows Desktop or taskbar. 3 Click Manage. 4 Locate Computer Management (Local) and click Disk Management. 5 Right-click the new drive. 6 Click Change Drive Letter and Path(s). 7 Click Change. 8 Use the drop-down box to select a drive letter for the new drive that is not assigned to a mapped network drive. 9 Click OK. 10 Click OK.
What should I do if my Rio Carbon is not detected by Rio Music Manager?	<ul style="list-style-type: none"> Your Rio Carbon was designed to work with the version of Rio Music Manager that was included on the Installation CD. Previous versions of Rio Music Manager may not be able to detect your Rio Carbon.

<p>What should I do if my Rio Carbon is not detected by my computer?</p>	<ul style="list-style-type: none"> • Verify that the USB cable is securely inserted into the USB port on both the Rio Carbon and your computer. • Connect the USB cable to a USB port on the back of your computer rather than to a USB port on the front of your computer. • If using a USB hub, connect to a powered USB hub. Unpowered USB hubs may not work. • Connect the USB cable directly to your PC, bypassing any USB hubs. • Remove USB extension cables from the connection path. • Disconnect other USB devices.
<p>What should I do if the display permanently locks up, does not display, or displays UPGRADER?</p>	<ul style="list-style-type: none"> • If you cannot read the display, the player firmware may be corrupted. Corrupted firmware may be caused by a failed firmware update. If the player's firmware becomes corrupted for any reason, follow these steps to start the player in Recovery Mode and proceed with the firmware update. <ol style="list-style-type: none"> 1 Reset the player by inserting a pin or needle into the EMERGENCY RESET hole. 2 Press POWER. The player should power on as normal. <p>If the player continues to lock up or does not display properly:</p> <ol style="list-style-type: none"> 1 Reset the player by inserting a pin or needle into the EMERGENCY RESET hole. 2 Press and hold MENU + POWER until UPGRADER is displayed on the screen. 3 Connect the Rio Carbon player to the computer using the USB cable. Proceed with the Firmware upgrade.

<p>Why would I ever want to reformat my Rio Carbon?</p>	<ul style="list-style-type: none">• If for any reason you suspect that your Rio player's file system has been corrupted, reformatting the player will restore the file system to its original state. <p>Use Windows Explorer to format Mass Storage Class compatible Rio players.</p> <ol style="list-style-type: none">1 Double-click My Computer on the Windows Desktop or in the Start Menu.2 Locate the Removable Disk (X:) or Player (X:) icon that is associated with the player. (X: equals the drive letter assigned to the Rio player.)3 Right-click the Removable Disk (X:) or Player (X:) icon.4 Click Format.... <p>Reformatting your Rio player will result in the deletion of all tracks and settings on the Rio Carbon. Reformatting your Rio player will immediately cancel any transfers currently in progress.</p> <ol style="list-style-type: none">5 If you are sure you want to reformat your player, click Start.
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<p>Why does my Rio Carbon experience errors after I unplug the USB cable?</p>	<ul style="list-style-type: none"> • Removing a Mass Storage Class (MSC) compatible Rio player from a USB connection prior to ejecting, stopping, or otherwise closing communication between the player and the computer may result in a corrupting the player's file system. <p>e.g. All tracks, although different, are assigned the same name; the player will not power off; etc.</p> <p>To eject or stop an MSC compatible Rio player please follow the instructions applicable to your computer's operating system:</p> <p>Windows ME</p> <ol style="list-style-type: none"> 1 Double-click the Unplug or Eject Hardware icon on the Windows taskbar. 2 Select USB Disk. 3 Click Stop. 4 Select the Removable Disk (X:) or Player (X:) icon. 5 Click OK. <p>Windows 2000</p> <ol style="list-style-type: none"> 1 Double-click the Unplug or Eject Hardware icon on the Windows taskbar. 2 Select USB Mass Storage Device. 3 Click Stop. 4 Select the Player USB Device icon. 5 Click OK. <p>Windows XP</p> <ol style="list-style-type: none"> 1 Double-click the Safely Remove Hardware icon on the Windows taskbar. 2 Select USB Mass Storage Device. 3 Click Stop. 4 Select the Player MSC USB Device icon. 5 Click OK.
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<p>Can I update the firmware on the Rio Carbon?</p>	<ul style="list-style-type: none"> • Yes. If available, firmware for your Rio can be downloaded online. <p>Note: Quit all applications before running the firmware update. While running the firmware update, do not close the program, turn off the player, or unplug the USB cable.</p> <p>Downloading the update</p> <ol style="list-style-type: none"> 1 Click on the following link: Firmware Upgrade. 2 Click on the link to the Rio Carbon. 3 Locate UPDATES and click Firmware. Select and download the latest software. Download the software that is specific to the operating system you use on your PC: <ul style="list-style-type: none"> *.exe (Windows) *.hqx (Mac) *.zip (Windows) *.txt (All operating systems—a text file including update information and instructions.) <p>Installing the update (PC)</p> <ol style="list-style-type: none"> 1 Connect the player to your computer with the USB cable. 2 Wait for Idle to be displayed on the player screen. 3 Double-click the file that you downloaded from the Rio website. The update should take approximately 30 seconds to load. <p>Installing the update (Mac)</p> <ol style="list-style-type: none"> 1 Connect the player to your computer with the USB cable. 2 Wait for Idle to be displayed on the player screen. 3 Double-click the Rio Update you downloaded. 4 Follow the instructions to complete the update.
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:: Glossary of Digital Audio Terms

Bass

Bass is the particular low-range area of the sound spectrum where low musical notes and sounds are located. Increasing the bass value will make the low vocals and drums more prominent in your music. You can select the amount of bass in your music by selecting various [Equalizer](#) options.

Bitrate

Bitrate denotes the number of bits per second used by a digital music file. The size and quality of a compressed digital audio file is determined by the bitrate used when encoding the file. Generally, the higher the bitrate used, the higher the sound quality, and the larger the file size. For example, a bitrate of 96kbps (96,000 bits per second) is generally thought of as “CD quality” for WMA audio files, and takes up about 0.75 megabytes (MB) per minute of music. At a 64kbps bitrate, the sound quality of WMA is similar to that of an FM radio signal, but approximately two minutes of music will fit in 1MB of space.

Codec

Depending on the context and kind of technology involved, codec can be defined as a compressed digital audio file format (like MP3, WMA, etc.), a “coding/decoding” chip used to translate between digital and analog transmissions (used in modems), or a compression/decompression algorithm. Codecs compress audio data into a file, often for efficient transmission over a network, and then decode it for playback. While all the codecs perform similar compression of digital audio, there are differences in the technology.

The Rio Carbon supports the following digital audio codecs:

- MP3
- WMA
- Audible

DRM

Digital rights management (DRM) is a type of encryption that is intended to protect copyrighted tracks and is added to many commercially purchased music files during the encoding process. DRM encryption frequently restricts the number of times a file can be downloaded, transferred to portable devices, or burned to CD. Copy protected music using DRM should be transferred to the Rio Carbon using Rio Music Manager.

Firmware

Firmware is the read-only software that is installed on the player. Like software it can be updated, but unlike software it can never be deleted from the player.

Gain

Gain is a measurement of the amplitude of frequency ranges. Gain adjustments boost or reduce frequencies to provide a more desirable audio output.

ID3 Tags

The ID3 tag is the part of the encoded MP3 or WMA file that contains information about the digital music file such as song title, artist, album title, encoding bitrate, track time duration, and so on. ID3 tag information is displayed on the Album/Artist/Track title line on the player's LCD.

Mass Storage Class

Mass Storage Class (MSC) is a transfer protocol that uses USB drivers that are common to many operating systems and devices. No additional software needs to be installed for the MSC transfer protocol to work because MSC uses drivers already on a computer's operating system. Because MSC compatible Rio players are treated as removable drives, any type of file can be transferred to MSC compatible Rio players using Windows Explorer. Although any type of file can be transferred, to assure full functionality, playlists and copy protected music using Digital Rights Management (DRM) should be transferred to Rio players using Rio Music Manager.

MP3

MP3 is short for Moving Pictures Experts Group Audio Layer 3. MP3 is the most well known compressed digital audio file format. This format allows for near "CD quality" sound, but at a fraction of the size of normal audio files. MP3 conversion of an audio track from CD-ROM can reduce the file size by approximately a 12:1 ratio with virtually no perceptible loss in quality. MP3 compression removes the redundant and irrelevant parts of a sound signal that the human ear doesn't hear. This digital sound encoding and compression process was developed by the Fraunhofer Institute for Integrated Circuits and Thomson Multimedia.

Playlist

A playlist is a custom grouping of tracks that has been saved for later use. Rather than playing every track on the player playlists can be used to play specific tracks in specific orders. Rio Carbon supports .asx, .m3u, and .pls formatted playlists. Tracks that are referenced by a playlist must be present on the Rio Carbon. Playlists that are transferred to a Rio player by an application other than Rio Music Manager may not function properly on Rio players.

Rip and Encode

Rip and encode refers to the process of extracting audio from a music CD (ripping) and encoding it into a compressed digital audio format like MP3 or WMA.

Synchronize

Rio Music Manager can automatically (or manually) delete old content, transfer new audio content, and keep the content on your Rio Carbon fresh and dynamic. Rio Music Manager must be open for synchronization to occur.

Treble

Treble notes occupy the higher portion of the sound spectrum. Increasing the treble value will raise the levels of the high sounds in your music files. You can select the amount of treble in your music by selecting various [Equalizer](#) options.

VBR

Variable Bitrate (VBR) encoding converts tracks at a variable rate, using higher bitrate encoding for complex portions and lower bitrate encoding for pauses in songs.

WMA

Windows Media Audio (WMA) is a compressed audio format created by Microsoft as an alternative to MP3. The WMA codec offers greater file compression than the MP3 codec, enabling storage of more digital audio tracks in the same amount of space when compared to MP3s at the same level of quality.

:: ECC, FCC, and Industry Canada Compliance

Statement of Compliance

This product complies with Council Directive 89/336/EEC and Council Directive 72/23/EEC.

Federal Communications Commission (FCC)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

:: Safety

IMPORTANT SAFETY INSTRUCTIONS

Read these instructions. Keep these instructions. Heed all warnings. Follow all instructions.

Do not use this apparatus near water.

Clean only with a dry cloth.

Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized-type plug: A polarized plug has two blades with one wider than the other. The wide blade is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched, particularly at the plug, convenience receptacle, and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer.

Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightening storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the when power-supply plug or cord is damaged, liquid has been spilled or objects have fallen onto the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Apparatus should not be exposed to dripping or splashing and no objects filled with liquids, such as vases, should be placed on the apparatus.



CAUTION

RISK OF EXPLOSION, DAMAGE OR BATTERY LEAKAGE IS POSSIBLE IF BATTERY IS REPLACED INCORRECTLY OR BY AN INCORRECT TYPE. NEVER ATTEMPT TO CHARGE A NON-RECHARGEABLE ALKALINE BATTERY. DISPOSE OF USED BATTERIES ACCORDING TO INSTRUCTIONS OR LOCAL LAWS.

Use of headphones while operating a vehicle is not recommended and is unlawful in some states and areas. Be careful and attentive while driving. Stop operation of the player if you find it disruptive or distracting while operating any type of equipment. Listening to music at full power over extended periods of time can be damaging to the hearing of the user.

Index

A

About 38
Accessories 7
Advanced Features 22
Album 19
Artist 19

B

Backlight 29
Basic Operations 12
Bass
 definition 47
Battery
 indicator 42
Bitrate
 definition 47
Bookmarks 23
Buttons and Controls 17

C

Charging the battery 6
Codec
 definition 47
 MP3 48
 WMA 49
Contrast 29
Controls 17
Copy tracks 13
Customer Service
Information 39

D

Date View 5
Display 29
DRM 47

E

Earphones 6
EMERGENCY RESET 3
Encoding 13
Equalizer 26

F

Firmware 48
Forward 2, 17
Frequently Asked
Questions 40

G

Genre 20
Getting Started 1
Glossary 47

H

Help 39

I

ID3 Tag
 definition 48
iTunes 11

L

Language 31
Lock Mode 33
Lock Setup 32

M

MP3 48
MSC 48

N

New Music 20

P

Play All 19
Play/Pause 2, 17
Playback 25
Playlist 21
Playlists 48
Power button 2, 3
Power settings 27

R

Recordings 21
Reformat 44
Resume 28
Reverse 2, 17
Rio Music Manager 10
Ripping and Encoding 49

S

Settings 24

Spoken Word 21
Stop 2, 17
Stopwatch 37

T

Tags 34
Technical Support 39
Time 30
Time Code View 5
Track 20
Track Format View 5
Transferring tracks
 iTunes 16
 Rio Music Manager
 14
Treble
 definition 49
Troubleshooting 39

U

Upgrading Firmware 46
USB-AC 6

V

Variable Bitrate (VBR)
49
Voice Record 35

W

WMA 40, 49

Riō

2600 San Tomas Expy.
Santa Clara, CA 95051-0953
USA